

Notice of Allowability

Application No.

10/799,501

Examiner

Etsub D. Berhanu

Applicant(s)

EDA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 08/24/2006.
2. ☒ The allowed claim(s) is/are 1,3 and 5-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ehab Samuels on September 13, 2006, wherein the applicant and examiner discussed amending claims 1 and 13-15. Regarding claims 14 and 15, "number of moles of oxyHb in blood per unit length" was amended to read -- an oxyHb amount in blood -- to provide a clearer unit of measure.

The application has been amended as follows:

Claim 1 has been amended to read:

1. A device for measuring strategy acquisition when a subject performs a predetermined assignment of work comprising:

a measuring portion that measures an oxyHb amount in blood in a predetermined measuring region of a brain of a subject;

a time change data producing portion that obtains the oxyHb amount in the blood measured by the above-mentioned measuring portion chronologically and that produces time change data as data showing time change of the oxyHb amount in the blood;

an average data producing portion that calculates average values of the oxyHb amount [amount on each work], from the start point of time to the completion point of time of conducting each work, and produces average value data indicating an average value of the oxyHb amount while the subject conducts each assigned work based on the time change data produced by the

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time change data producing portion in case the subject conducts multiple works that can be solved using a definite law or regularity; and

an output portion that displays or outputs the average value data produced by the average value data producing portion.

Claim 13 has been amended to read:

13. A method for measuring strategy acquisition, in case a subject conducts multiple works that can be solved using a definite law or regularity comprising:

determining an oxyHb amount in the blood in a predetermined measuring region of a brain of the subject that is measured chronologically by the use of near-infrared spectroscopy;

calculating average values of the oxyHb amount [on] corresponding with each work based on the time change data as data showing the time change and determining average value data indicating an average value of the oxyHb amount on each work;

producing an average value data showing the average value of the oxyHb amount during the time period the subject conducts each work, and displaying or printing the average value data, wherein a state of strategy acquisition to solve the work for the subject is determined.

Claim 14 has been amended to read:

14. A device for measuring strategy acquisition of a work project, comprising:

a measuring unit that measures [a number of moles of oxyHb in blood per unit length] an oxyHb amount in blood at a predetermined measuring region in a person's brain where strategy acquisition of the work project occurs;

a time change data producing unit that receives the [number of moles of oxyHb per unit length] oxyHb amount in blood measured by the measuring unit and generates time change data corresponding to time change of the [number of moles of oxyHb per unit length] oxyHb amount in blood;

an average data producing unit that averages the [number of moles of oxyHb per unit length] oxyHb amount in blood measured for the work project that the person conducts, from the start point of time to the completion point of time of conducting each work, based on the time change data produced by the time change data producing unit when the person performs the work project that can be solved using a definite law or regularity, and generates average value data for the work project; and

an output unit that outputs the average value data produced by the average value data producing portion.

Claim 15 has been amended to read:

15. A method for measuring strategy acquisition of a work project that can be solved using a definite law or regularity, the method comprising the steps of:

measuring chronologically [a number of moles of oxyHb per unit length] an oxyHb amount in blood at a predetermined measuring region in a person's brain where strategy acquisition of the work project occurs;

generating time change data corresponding to the time change of the [number of moles of oxyHb per unit length] oxyHb amount in blood;

generating average value data corresponding to the average value of the [number of moles of oxyHb per unit length] oxyHb amount in blood measured for the work project based on time change data; and

outputting the average value data to determine the state of strategy acquisition for solving the work project.

2. The following is an examiner's statement of reasons for allowance: Hoshi et al. (cited in previous office action) discloses a device and method for detecting brain activation during mental tasks. Hoshi et

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al. does not disclose an average data producing portion that calculates average values of oxyHb amounts in the blood on each work, from the start point of time to the completion point of time of conducting each work, and produces average value data indicating an average value of the oxyHb amount while the subject conducts each work, as amended in claims 1 and 14, in combination with the other claimed elements. Hoshi et al. does not disclose a method for measuring strategy acquisition wherein average value data is determined based on time change data of the oxyHb amount present during the conducting of an individual piece of work, as disclosed in claims 13 and 15, in combination with the other claimed steps.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etsub D. Berhanu whose telephone number is 571.272.6563. The examiner can normally be reached on Monday - Friday (Every other Friday off).

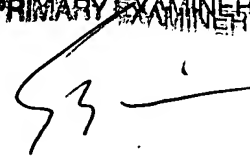
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ERIC F. WINAKUR
PRIMARY EXAMINER

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A handwritten signature in black ink, appearing to be 'E3' followed by a horizontal line, is written over the printed name and title of the examiner.